

AD-A184 748

A DRAMATIC CHALLENGE TO OPERATIONAL THEORY: THE SINAI  
CAMPAIGN OCTOBER 1973 (U) ARMY COMMAND AND GENERAL STAFF  
COLL FORT LEAVENWORTH KS SCHOOL

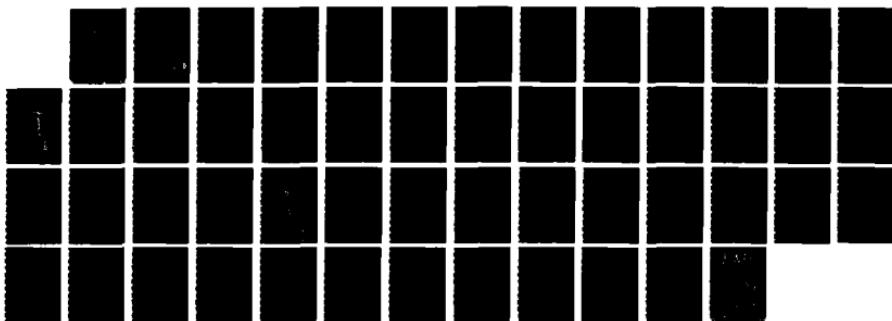
R W MIXON 81 MAY 87

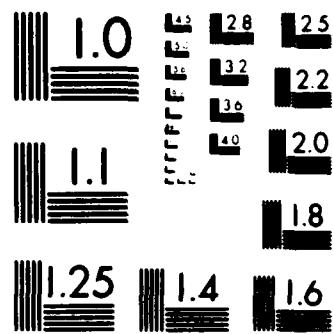
1/1

UNCLASSIFIED

F/G 15/6

NL





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS 1964

DTIC FILE COPY

2

AD-A184 740

**A Dramatic Challenge to Operational Theory: The Sinai Campaign,  
October 1973**

by

**Major Robert W. Mixon, Jr.  
Armor**

**School of Advanced Military Studies  
U.S. Army Command and General Staff College  
Fort Leavenworth, Kansas**

**1 May 1987**

**Approved for public release; distribution is unlimited**

**DTIC  
ELECTED  
SEP 25 1987  
S E D**

87-3051

**87 9 18 028**

## UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

Form Approved  
OMB No 0704-0188  
Exp Date Jun 30, 1986

## REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution unlimited.	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
4. PERFORMING ORGANIZATION REPORT NUMBER(S)		6a. NAME OF PERFORMING ORGANIZATION School of Advanced Military Studies, USAC&GSC	
6b. OFFICE SYMBOL (if applicable) ATZL-SWV		7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code)  Ft. Leavenworth, Kansas 66027-6900		7b. ADDRESS (City, State, and ZIP Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (if applicable)	
8c. ADDRESS (City, State, and ZIP Code)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
		PROGRAM ELEMENT NO.	PROJECT NO.
		TASK NO.	WORK UNIT ACCESSION NO
11. TITLE (Include Security Classification) A Dramatic Challenge to Operational Theory: The Sinai Campaign, October 1973 (U)			
12. PERSONAL AUTHOR(S) MAJ Robert W. Mixon, Jr. USA			
13a. TYPE OF REPORT Monograph	13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Year, Month, Day) 87/5/26
15. PAGE COUNT 43			
16. SUPPLEMENTARY NOTATION			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) center of gravity defense campaign plan combined arms maneuver AirLand Battle doctrine	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This monograph analyzes the 1973 Sinai Campaign in light of the theoretical implications that this historical model has to offer the professional soldier. Following a chronological format, this paper discusses the major elements of the planning and conduct of the campaign. Concurrently, the principal theoretical aspects are presented and reviewed.			
The major theoretical propositions that evolve from the analysis of the 1973 Sinai Campaign are instructive in the study of the operational level of war. The pivotal relationship of means, ways, and ends form the foundation of the study. Both the Egyptians and the Israelis discovered the importance of the relationship at various times during the campaign. The ability of the Israelis to seize the concept and remain oriented on it was a key factor in their success. (over)			
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>	
22a. NAME OF RESPONSIBLE INDIVIDUAL MAJ Robert W. Mixon, Jr.		22b. TELEPHONE (Include Area Code) (913)684-2138	22c. OFFICE SYMBOL ATZL-SWV

Item 19 (continued):

Similarly, the superiority of the defense was challenged in the Sinai. The Israeli superiority in maneuver was initially overcome by the Egyptian formulation and execution of a plan which placed the IDF in a battle of attrition. After their success on the defensive, however, the Egyptians proceeded to exceed their culminating point with an abortive attack on 14 October. That mistake hastened the Israeli assumption of the initiative and spelled the end of the superiority of the defense in this campaign. This monograph suggests that the defense can only be superior for limited periods of time in modern war-- and even then under specific circumstances.

Among the other theoretical propositions that are challenged in this paper the concept of the center of gravity stands out as one of the major issues. The Egyptians correctly identified the Israeli Air Force and armor forces as "the hubs of all power and movement" for their enemies; however, they failed to neutralize them while protecting their own (the surface to air missiles and their operational armor reserves). Thus they failed the test of the operational art as defined by FM 100-5, and were on the brink of defeat at the end of the campaign.

Finally, the paper addresses the involvement of the superpowers (the United States and the Soviet Union) in limited wars. Fighting against the backdrop of possible global conflict, both the Egyptians and the Israelis attempted to reach limited goals before the superpowers grew alarmed and called a halt to the fighting. This evolution in modern war has far-reaching implications for future campaign planners, and this paper suggests the need for increased emphasis on this important aspect of the modern operational art.

School of Advanced Military Studies  
Monograph Approval

Name of Student: Major Robert W. Mixon, Jr.

Title of Monograph: A Dramatic Challenge to Operational Theory: The Sinai Campaign, October 1973

Approved by:

Robert M. Epstein

Robert M. Epstein, Ph.D.

Monograph Director

Richard Hart Sinnreich

Colonel Richard Hart Sinnreich, M.A.

Director, School of  
Advanced Military Studies

Philip J. Brookes

Philip J. Brookes, Ph.D.

Director, Graduate Degree  
Programs

Accepted this 10th day of May 1987.



Accession For	
NTIS GRA&I <input checked="" type="checkbox"/>	
DTIC TAB <input type="checkbox"/>	
Unannounced <input type="checkbox"/>	
Justification _____	
By _____	
Distribution/ _____	
Availability Codes _____	
Dist	Avail and/or Special
A-1	

## ABSTRACT

A DRAMATIC CHALLENGE TO OPERATIONAL THEORY: THE SINAI CAMPAIGN, OCTOBER 1973 by Major Robert W. Mixon, Jr., USA, 45 pages.

This monograph analyzes the 1973 Sinai Campaign in light of the theoretical implications that this historical model has to offer the professional soldier. Following a chronological format, this paper discusses the major elements of the planning and conduct of the campaign.

Concurrently, the principal theoretical aspects are presented and reviewed.

The major theoretical propositions that evolve from the analysis of the 1973 Sinai Campaign are instructive in the study of the operational level of war. The pivotal relationship of *means, ways, and ends* form the foundation of this study. Both the Egyptians and the Israelis discovered the importance of this relationship at various times during the campaign. The ability of the Israelis to seize the concept and remain oriented on it was a key factor in their success.

Similarly, the superiority of the defense was challenged in the Sinai. The Israeli superiority in maneuver was initially overcome by the Egyptian formulation and execution of a plan which placed the IDF in a battle of attrition. After their success on the defensive, however, the Egyptians proceeded to exceed their culminating point with an abortive attack on 14 October. That mistake hastened the Israeli assumption of the initiative, and spelled the end of the superiority of the defense in this campaign. This monograph suggests that the defense can only be superior for limited periods of time in modern war--and even then under specific circumstances.

Among the other theoretical propositions that are challenged in this paper, the concept of center of gravity stands out as one of the major issues. The Egyptians correctly identified the Israeli Air Force and armor forces as "the hubs of all power and movement" for their enemies; however, they failed to neutralize them while protecting their own (the surface to air missiles and their operational armor reserves). Thus they failed the test of the operational art as defined by FM 100-5, and were on the brink of defeat at the end of the campaign.

Finally, the paper addresses the involvement of the superpowers (the United States and the Soviet Union) in limited wars. Fighting against the backdrop of possible global conflict, both the Egyptians and the Israelis attempted to reach limited goals before the superpowers grew alarmed and called a halt to the fighting. This evolution in modern war has far-reaching implications for future campaign planners, and this paper suggests the need for increased emphasis on this important aspect of the modern operational art.

## Table of Contents

	Page
I. Introduction	1
II. Plans	3
III. Egyptian Offensive	11
IV. Stalemate	18
V. Israeli Counteroffensive	23
VI. Conclusion	31
Endnotes	37
Bibliography	40

### Maps:

- A. Operation BADR
- B. Situation Night of 7 October
- C. The Attack of 14 October
- D. Israeli Counteroffensive

All maps used in this monograph are taken from the German Army document Historical Exercise 1986: Suez Front 1973, prepared by *Taktikzentrum des Heeres* and translated by the U.S. Army Command and General Staff College Liaison Office, (German Tactics Center: U.S.L.L.O. Lower Saxony), 1 November 1986. I have added features for clarity.

## I. Introduction

"The Yom Kippur War.... ushered in a new era of military conflict." 1

At 1400 hours on 6 October 1973, the Egyptian armed forces surprised the Israelis by making an assault crossing of the Suez Canal. For the next three weeks the two sides were locked in a fierce struggle for political and military supremacy. Today both sides claim victory in the campaign. Other observers are equally divided on the outcome.

From a theoretical perspective, the Sinai Campaign serves as a fascinating crucible for the propositions inherent in our AirLand doctrine as stated in FM 100-5, Operations. The realities of operations in the Sinai desert in the fall of 1973 validate many of the "ingredients" in our theoretical "recipe" for war. Conversely, other elements of the theory of war in FM 100-5 do not fare as well.

Like many other campaigns in this text, the Sinai 1973 is a laboratory which produces mixed results. Officers have the difficult task of distilling theory via the lessons of history so that the end result will be a "recipe" that offers a good guarantee of success. The Sinai Campaign is valuable because it is a contemporary example of combat between sophisticated adversaries. Additionally, the conflict portrays many of the problems we expect to dominate future wars. Therefore this campaign is one of the best available for studying the operational level of war.

The planning for the campaign was difficult for both sides. The atmosphere of deterrence, the spectre of superpower intervention, dependence on outside sources for logistics, and the threat of nuclear escalation constrained Egyptian and Israeli war planners. Internal political considerations complicated preparations further. The critical question of

"What end state do we desire?" had to be carefully answered in light of what was attainable. The limits of military capabilities were but one of several factors limiting objectives. Only a limited amount of time was available before the superpowers (the United States and the Soviet Union) would force a cessation of hostilities. These different levels of constraints increased the necessity for careful, detailed preparations. Plans required branches and sequels that were carefully thought out.

The actual campaign can be summarized in three phases: I- the Egyptian Offensive; II- Stalemate; and III- Israeli Counteroffensive. Throughout these phases, a constant struggle occurred on both sides to match tactical doctrine with technology. After the initial Egyptian attack, attrition and maneuver alternated as the prevailing operational characteristics of fighting, as the two sides vied for the initiative. Once the Egyptians reached their culminating point on 14 October, however, the initiative passed to the Israelis for the remainder of the campaign. The Israeli Defense Forces (IDF) then capitalized on their qualitative superiority and pushed their maneuver skills to the maximum advantage, surrounding the Egyptian Third Army on the western side of the Suez before the superpowers halted the campaign. By the time that the United States and the U.S.S.R. were able to stop the fighting on 27 October, both sides were exhausted. Even with superpower support, severe losses and enormous consumption of supplies had taken an unexpectedly high toll on both sides.

Technology was the major cause of the unexpected consumption and losses during the campaign. Modern equipment such as tanks and howitzers used much more ammunition and fuel than planners had envisioned. Dramatic increases in the capabilities of air defense weapons and anti-tank guided missiles made the battlefield much more dangerous to tanks and

aircraft than it had ever been before. The impact of technological advances in fighting systems strained the logistics network of both sides during the three weeks of war. Considering the utter dependence that the Israelis and the Egyptians had on fragile logistical systems for sophisticated parts and equipment, it is surprising that the fighting lasted as long as it did.

In addition to the importance of seizing and retaining the initiative, many theoretical concepts were questioned or validated in the laboratory of Sinai 1973. The campaign certainly demonstrated that surprise is still possible on the modern battlefield. Friction, chance, and personality played important roles in the outcome of this campaign. The Clausewitzian theories of attack and defense were challenged, inasmuch as Clausewitz asserted that the defense was the stronger form of warfare.<sup>2</sup> The theoretical notion of the center of gravity appeared to be valid, since both sides sought to neutralize that of the other in order to create the conditions for success.

In the pages which follow, these issues will be discussed in greater detail. Theory will be tested in the laboratory of reality to determine the validity of our AirLand doctrine. Combined with other similar tests, this analysis of the 1973 Sinai Campaign will support or refute many important doctrinal concepts. Such evidence is vitally important to our future success practicing the operational art.

## II. Plans

Both Egypt and Israel expected conflict in the fall of 1973. The two sides had been at war for years. Since the dramatic Israeli victory in the 1967 Campaign the two nations had been fighting intermittently,

bombarding one another or launching commando raids across the Suez Canal. The Israelis, content to fortify the eastern bank of the canal, only made defensive plans. The Egyptians, seething over the losses of the Sinai and the Gaza Strip, plotted revenge in the form of some type of offensive operation that would set the conditions for international resolution of the dispute in their favor. Both sides knew it was only a matter of time before full scale war broke out, because the Egyptians could not accept the loss of territory and humiliation that they had suffered since 1967.

For the first time, however, the Egyptians realized that they could not conquer Israel. Therefore, as three prominent Egyptian authors described it, the next war with Israel would be a quick strike designed to gain limited objectives so that the superpowers would demand a lasting peace. "The military objective," they wrote, "was the defeat of the Israeli armed forces deployed in Sinai... and the seizure of strategic land areas which would pave the way for the complete liberation of the occupied territories in order to impose a just and peaceful solution to the problem."<sup>3</sup> Clearly, then, the Egyptians wanted the Sinai returned to them. They realized, though, that they could not seize even that much territory without the consent of both superpowers. Their capabilities were too limited to do much more than score a quick, limited victory that would lead to greater political gains. The question Egyptian war planners had to answer was, "How do we get the superpowers to impose terms on the Israelis that will lead to the return of the Sinai?"

Fortunately for the Egyptians, their president was a man who understood the delicate balance of means-ways-ends in operational planning. Lacking the charisma of his predecessor, Anwar el Sadat was nonetheless a leader of vision and organizational skill. Years of military

experience had given him a clear understanding of Egyptian military strengths and weaknesses. Furthermore, he had learned through being Nasser's deputy for several years what the limitations of Soviet support were. He understood that the Soviet Union would finance an attack on Israel to gain limited ends; however, they wanted to control the action closely in return for their support.

After diplomacy failed to solve the problem of returning captured territory to Egypt in early 1971, Sadat turned to war. He carefully orchestrated Soviet support (despite the fact that he disliked the Moscow regime for both political as well as religious reasons). Based on that support he began, in concert with his senior generals, to develop a campaign plan for attacking Israel across the Suez Canal.<sup>4</sup>

Based on a continuing series of studies of both friendly and enemy capabilities, two plans emerged from the Egyptian planning staff codenamed GRANITE TWO and THE HIGH MINARETS. The former was an ambitious plan to cross the Suez on a wide front and then concentrate forces to attack and hold the key passes in the Sinai, Mitla and Gidi. The latter was similar but far less daring-- a broad front crossing would be made to a shallow depth, and then the bridgehead would be held until the Israelis exhausted themselves trying to retake it. The Chief of Staff of the Army, General Saad El Shazly, favored THE HIGH MINARETS because he knew that the Egyptians could do no more than cross the Suez and hold limited gains in light of their qualitative and leadership deficiencies-- even with substantial Soviet help. General Ismail Ali, the Minister of War, heartily agreed. "GRANITE TWO was impossible on present resources," Shazly later wrote, "we should carry on with The High Minarets."<sup>5</sup>

What both men had not counted on was the impact of coalition planning on the development of the Egyptian war plan. Throughout the interwar period Egypt had sought, and achieved, agreement with Syria and most other Arab states to fight Israel together. Such an arrangement did not come without a price, however. In late 1972, Ali told Shazly to be prepared to carry out GRANITE TWO after seizing crossing sites -- ostensibly because the Syrians demanded it. Syria wanted assurance that Egypt would present such a significant threat to Israel that the Israelis would not treat the Sinai as an economy of force theater. A bitter Army Chief of Staff dutifully briefed his subordinates, but he told them not to expect it to be executed. Instead, he concentrated on planning a broad crossing to seize limited objectives six to nine miles inland, subsequently assuming the operational defensive. This would be the heart of the Egyptian campaign plan. In September of 1973, the execution date for the plan was set for 6 October, during the month of Ramadan in the Muslim calendar. Since the prophet Mohammed had won a great victory during that same month in the year 624, the plan name was changed to salute that triumph; thus, it was renamed Operation BADR.<sup>6</sup> (see Map A)

The Egyptian plan had an "end state" that was remarkable for a number of reasons. First, it matched limited ways and means to limited ends. Sadat and his generals realized that they could not overcome the qualitative deficiencies that the Egyptian military suffered in a reasonable time period (that is, in the 1970s) despite massive Soviet support. "It was impossible for us to launch a large-scale offensive," General Shazly wrote, "to destroy the enemy concentrations in Sinai or to force enemy withdrawal from Sinai and the Gaza Strip. All that our capabilities would permit was a *limited* attack (author's italics)." <sup>7</sup>

32  
50

MAP A

640 700

280 28

OPERATION

BADR

PORT SAID

QANTARA

XXXX

2

ISMAILIA

XXXX

3

XXXX

TASSA

XX

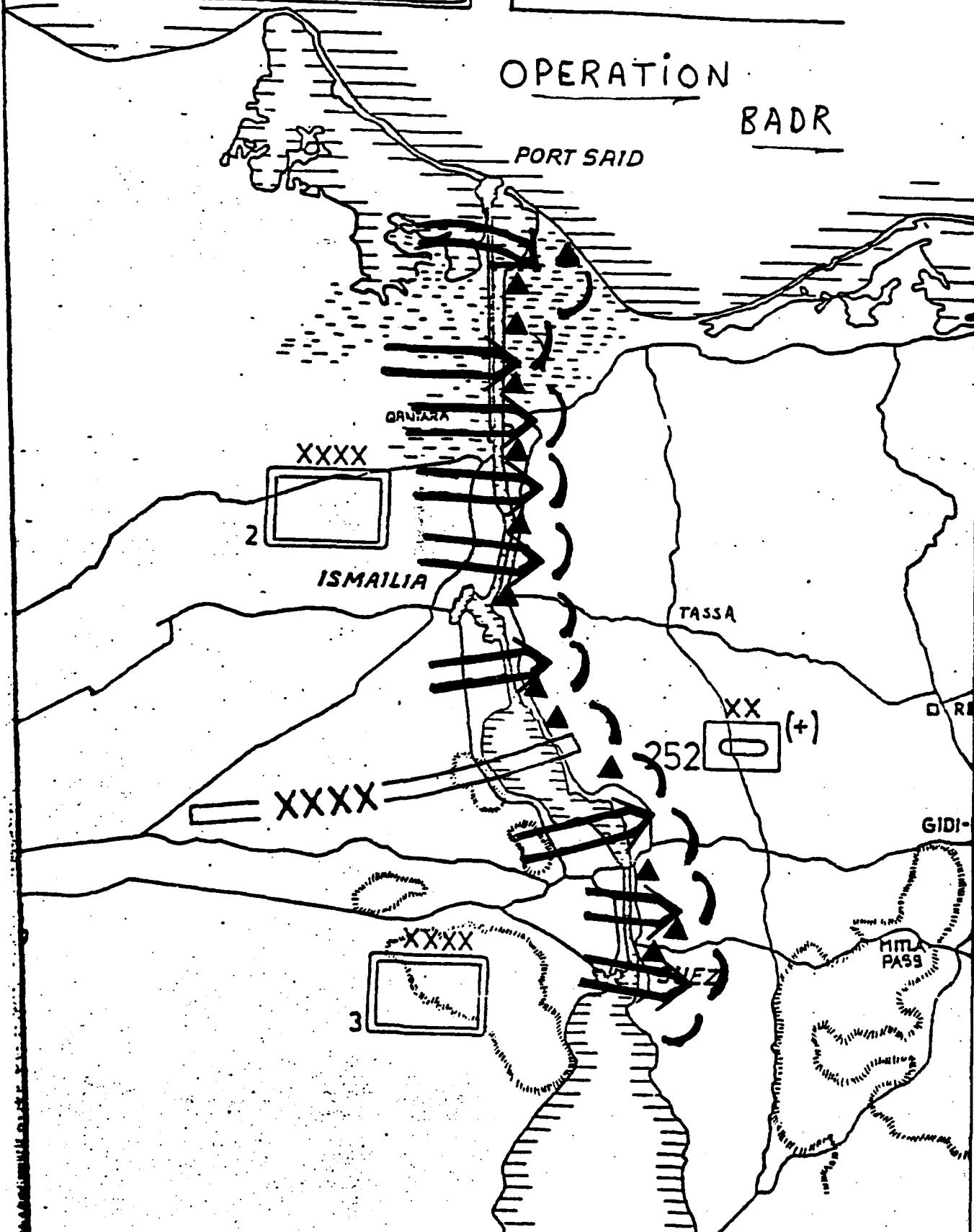
(+)

252

GIDI-

MITLA  
PASS

EL SUEZ



Secondly, the Egyptian planners identified the centers of gravity of the Israeli forces -- the air force and the armor units -- and they planned to neutralize those "hubs of all power and movement" by creating a shield of air defense and antitank guided missile (ATGM) systems within which the ground forces could operate somewhat freely.<sup>8</sup> As events unfolded, the Egyptian assessment proved to be quite accurate. Only when they sent their operational reserves beyond their air defense umbrella on 14 October were the Israelis able to assume the offensive and upset the Egyptian plan.<sup>9</sup>

Finally, Operation BADR effectively considered the element of surprise as a tremendous combat multiplier. Carefully predicting the sequence of battles that would take place leading to the desired end state, Shazly and the rest of the Egyptian planners concluded that the initial crossing battle and the defensive battle inland were the decisive contests to be won. By crossing in mid-afternoon with little artillery preparation, the Egyptians felt they could strike the enemy at a time, place, and manner for which he would be unprepared. Subsequently, by using infantry equipped with thousands of anti-tank guided missiles in synergism with armor, air, and artillery, they believed that the Israelis would be equally surprised when they counterattacked with tanks to destroy the bridgehead in the second decisive battle of the campaign.

The Israelis showed less operational skill in their campaign planning, principally because they did not believe the Sinai theater deserved much effort in that regard. After their stunning victory in 1967, some Israelis believed that they were the world's third superpower. Political and military leaders in Israel touted the country's greatness:

Israel is now a military superpower. Every national force in Europe is weaker than we are. We can conquer

In one week the area from Khartoum to Baghdad and Algeria.<sup>10</sup>

This prevailing attitude among Israeli leaders inevitably led to shoddy planning. Although the IDF constructed sixteen fortified observation posts along the Suez Canal for early warning, they failed to devote sufficient attention to stationing a reaction force nearby capable of rejecting a major incursion into Sinai. Instead they assigned one armored division of 300 tanks a 110 mile front to defend. Making matters worse, the IDF headquarters specified that the armor would be positioned in company sized packets. The major arbiter of victory, the Israelis believed, would be the vaunted air force:

When major hostilities threatened, the tanks were to move to their pre-arranged firing positions (along the canal) and hold back the enemy until the reserves arrived for the decisive counter-stroke. Meanwhile the IAF, with new ECM gear and stand-off missiles including the American-supplied Shrike and Mavericks, believed that it would be able to suppress the Egyptian air-defence system without unacceptable losses.<sup>11</sup>

The Israelis, still flushed with memories of enemy armor columns destroyed at the Mitla Pass by fighter jets and tanks in 1967, envisioned a repeat performance if the Egyptians crossed the Suez in 1973. Their plan, codenamed DOVECOTE, rested entirely on the premise that the Egyptians would cooperate with Israeli assumptions. Thus, the Israelis assumed that Egypt would give the IDF plenty of warning, attack without employing combined arms, make no effort to close the technological gap between the two sides, and ignore the lessons of tactical doctrine that were obvious as a result of the 1967 War.

To make matters worse, the Israelis had done little to improve their fighting capabilities since the last war. In some respects they had regressed. Unlike the 1967 campaign, the IDF plan for the next war had no clear vision of what the end state of the campaign would be. Surrendering the initiative to the Egyptians completely, IDF planners had only a dim view of when and where they would regain it. They envisioned a climactic battle somewhere in the Sinai, but there was no clear sequence of battles that would result in that "grand finale." As victorious armies had done before them -- notably the French and British after World War I and the Americans in Korea prior to 1950 -- the Israelis merely planned to have forces available in an area where they might be attacked. They thought that would be enough to prevent defeat.

In addition to ignoring the historical lessons of operations like Sedan in 1940 and the German Ardennes counterattack in 1944, the Israelis placed far too much faith in their intelligence network (as we do in NATO today, perhaps?). Having mostly a reserve army, the IDF depended on time to gather their troops for war-- at least 72 hours advance warning.<sup>12</sup> The Israeli intelligence system, operating against an enemy across the Suez Canal which constantly displayed hostile intentions, lacked the ability to discern what specific activities pointed to a major attack. Since the United States had chosen not to cover the Middle East with its limited satellite assets, there was no one to help the Israelis avoid being surprised.<sup>13</sup>

A series of political and economic constraints hampered the Israelis, though, which makes some of their planning decisions more understandable. First, they depended on the reserves to carry the bulk of any fighting, since they could not afford to maintain a large standing army. Every time they alerted the reserves, the cost to the fragile economy was enormous (the

last Israeli alert before the Arab attack in October had been called in May 1973 on the Lebanese border, and it had cost the government 4.5 million British pounds).<sup>14</sup> Finally, world opinion no longer sided with the Israelis as the underdogs. Having captured over 3000 square kilometers in 1967, Israel was now looked upon as the dominant power in the Middle East, free of the earlier dilemma of lacking strategic depth. If they were to maintain large forces poised on the Egyptian, Jordanian, or Syrian borders for another preemptive strike, they would be sure to operate without international support--especially American support. This last factor was such a powerful deterrent to Israeli action that even when news of an impending Arab attack reached Prime Minister Golda Meir on 5 October, she refused to allow her generals to launch a 1967 - style strike.

Thus, Israeli planning errors magnified their disadvantages. As mentioned earlier, they dissipated what forces they had over a broad front, so they could not mass anywhere. More importantly, they badly miscalculated the time they would need to deploy armor reserves to the eastern bank of the Suez Canal from deep within Israel. By the time the reserves crossed the 400 kilometers of desert to counterattack the Egyptians, the invaders would have gained precious hours to build defenses and get their own armor across the canal. "No doubt Dayan (the Minister of Defense) also hoped that his air force would be able to compensate for the thin ground forces in Sinai...," one author wrote later in an attempt to explain why the Israelis had left so much to chance in their operational planning.<sup>15</sup>

In summary, the Egyptians matched means,ways, and ends much more effectively than the Israelis did in planning for the Sinai campaign. Sadat and his military leaders knew that the IDF would react violently to an

Egyptian crossing of the Suez Canal; thus, they planned accordingly. Judging that their chances of success were better if they attacked quickly and then assumed the operational defensive, they formulated a plan that would lead to that end state. The Israelis felt they were so qualitatively superior that they could deal with any contingency that might arise--as long as they had effective intelligence. Both understood the limitations of time, because they realized that the superpowers would impose an armistice shortly after hostilities commenced. The need for logistical support, however, drove both the Egyptians and the Israelis to shape their strategies so that the superpowers would not abandon them once the war began. Egypt agreed to a modicum of Soviet control over their preparations. Israel abandoned the proven doctrine of the preemptive strike in order to maintain American support. Within these constraints, however, Sadat and his generals shrewdly calculated what they could attempt with some reasonable assurance of success. Golda Meir and her generals, on the other hand, simply hoped that by having powerful forces available, something good would come of it.

### III: Egyptian Offensive

The surprise that the Egyptians achieved on 6 October was virtually complete: the time and manner of the attack had caught the IDF completely unprepared. Two hundred Egyptian jets swooped low over the canal, bombing several designated targets east of the strongpoints at precisely 1400 hours. The other movements of Egyptian forces and fire support followed with clockwork precision. The Egyptian Army Chief of Staff described part of the assault as follows:

While our howitzer and mortar barrage kept the enemy infantry pinned in their shelters, the rest of our artillery- the flat trajectory pieces- deployed into firing position.

At 1420 hours, they opened direct fire against the Bar-Lev strongpoints. The 4,000 men of Wave One poured over ramparts and slithered in disciplined lines down to the water's edge. The dinghies were readied, 720 of them, and a few minutes after 1420 hours, as the canisters began to belch clouds of covering smoke, our first assault wave was paddling furiously across the canal, their strokes falling into the rhythm of their chant,

"Allahu Akbar..Allahu Akbar." 16

The Egyptian crossing plan was elegant in its simplicity. First, air and artillery would shock the Israelis and delay their responsiveness. Second, assault crossings would be made by infantry in rubber rafts (two waves of 4000 men each) while commando units were inserted by helicopter deep in the enemy rear. Next, engineers would use water pumps to blast paths through the twenty meter high embankments that the IDF had built on the eastern side of the canal. Meanwhile, tanks would be ferried to the far side while the strongpoints were being taken and infantry set up temporary positions beyond the fortresses. Then, five divisions of infantry would advance up to two miles inland, with limited tanks but large numbers of ATGMs, and set up defensive positions to meet the expected tank counterattack. While that effort was underway, the engineers would install heavy bridges to allow the second echelon of five divisions of armor, mechanized infantry and their artillery to cross the canal. Since the sun would be in the defender's eyes for the afternoon of 6 October and the subsequent night would be 12 hours long, Egyptian planners felt that they could accomplish most of the crossing by the first five divisions prior to dawn on the 7th. The planners proved to be astonishingly accurate.

The Israelis reeled under the shock of the initial attack. Facing surprise assaults on two fronts (Syria had attacked in conjunction with the Egyptians), the IDF general staff groped for an adequate response. General Mendler, commanding the armored division behind the Bar Lev Line, tried to counterattack in late afternoon. Since the Egyptians had crossed all along the width of the canal, though, neither Mendler nor General Gonen--the commander of IDF forces in the Sinai--could determine where the main attack was. Israeli aircraft, responding within minutes of the crossing, were shot down by the Egyptian SAM umbrella almost as fast as they appeared near the canal. Mendler counterattacked in piecemeal fashion from the company strongpoints, and his tanks were soon burning all along the front. Without air support, the Israeli tanks drove right into Egyptian infantry ambushes, where they were annihilated by SAGGERS and SNAPPERS. So many missiles confronted the tanks that there was virtually no escape, and many of the IDF vehicles were crisscrossed with wires from the massive numbers of missiles that had passed overhead. In this murderous tactical environment, Mendler could not prevent the Egyptian crossing from succeeding. Tanks alone, in small groups at that, had no synergism counter the Egyptian infantry, artillery, armor, and air directed against them. Of the 276 tanks that Mendler had available in his armored division on the afternoon of 6 October, fewer than 90 survived by dawn the next morning.<sup>17</sup>

The Egyptians had attacked across much of the entire length of the canal, deliberately avoiding selecting a main effort or *schwerpunkt* in order to dilute the IDF counterattack. Throughout the night of 6-7 October, they continued to cross the canal and expand their bridgeheads. Engineers worked feverishly to construct bridges as dawn broke on the 7th, under the

protection of the air defense missiles. Months of careful preparation, rehearsals, and deception efforts had completely fooled the Israelis as to the readiness of the Egyptians to conduct such a complex operation. As the infantry divisions waited for their armored and mechanized reinforcements and prepared to push inland, all aspects of BADR seemed to be working perfectly. General Ismail (Egyptian Forces Commander), and his Chief of Staff, General Saad El Shazly, had much to be pleased about.

The Israeli inability to identify the Egyptian main effort was symptomatic of the general malaise that characterized General Gonen's headquarters at Refidim, 50 miles from the canal. Air reconnaissance was out of the question against the swarming missiles that seemed to be flying over the Egyptian ground forces whenever an IDF aircraft appeared. The Bar Lev outposts, too few to be effective in providing surveillance of the whole length of the canal, were in varying states of panic after the initial shock of the attack wore off. Only a daring helicopter reconnaissance flight by Mendler's deputy General Pino on the evening of 6 October provided any coherent information of what was happening in vicinity of the fighting.<sup>18</sup>

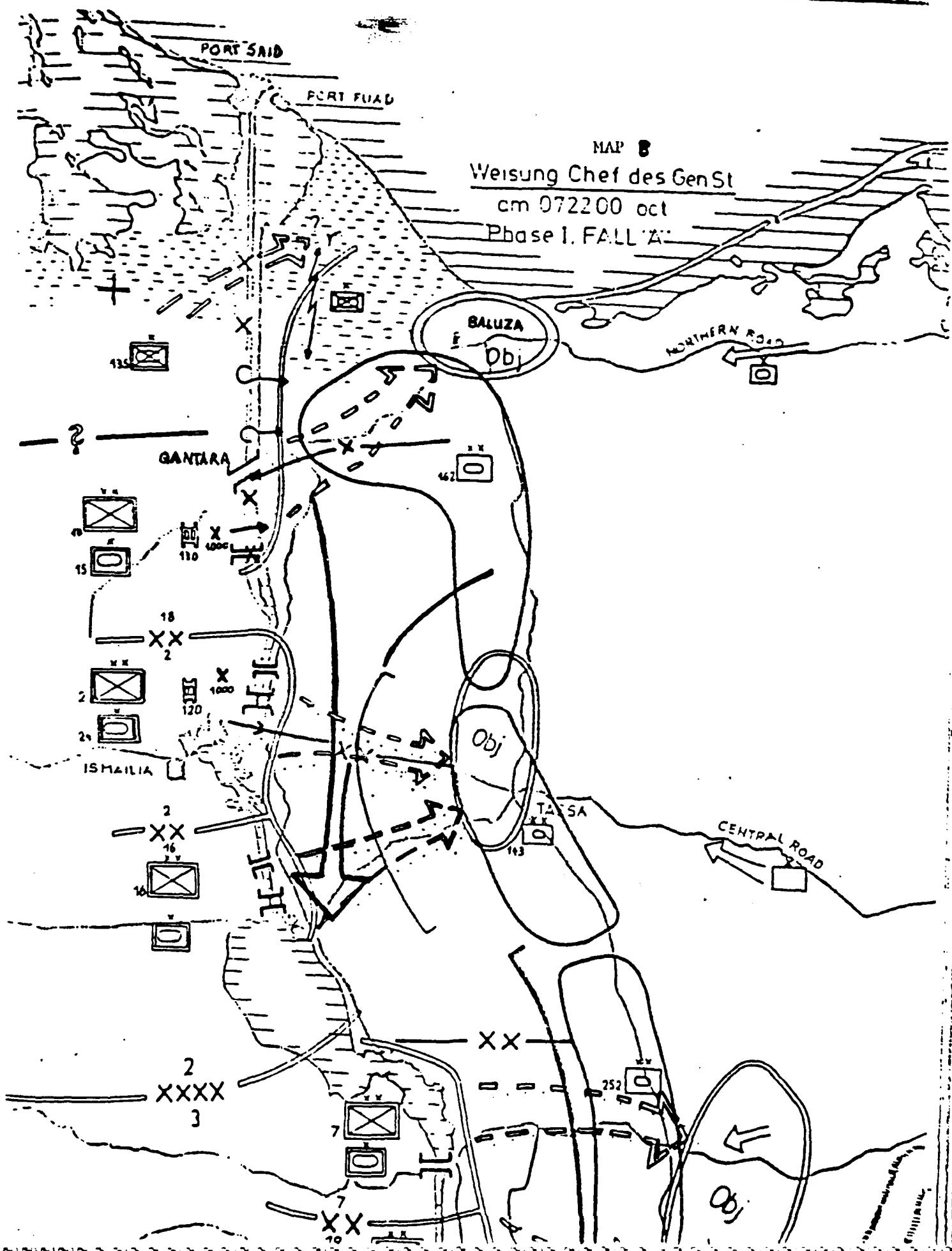
By the morning of the 7th, however, the reserves began to arrive from Israel in strength. Attacking on Israel's most holy day, Yom Kippur, had proven to be beneficial to the IDF mobilization effort, because most soldiers were at home rather than work. Contrary to what the Egyptian planners had believed, the holiday worked to get the IDF on the battlefields faster than they would have assembled otherwise.

Two of the earliest arrivals in the Sinai on the morning of 7 October were Generals Sharon and Adan, the most senior reserve commanders. Gonen hastily assigned them sectors of responsibility. By noon, Adan in the north and Sharon in the south had division size armor forces within ten miles of

the Suez. Gonen's orders were to "report and delay the enemy advance."<sup>19</sup> Sharon was furious over this order, since he had planned on counterattacking across the canal once his forces were completely assembled. He called IDF headquarters in Tel Aviv to complain that Gonen was dissipating his division by telling him to defend along a broad front. Adan, on the other hand, spent the afternoon of the 7th assembling forces as best he could.

Moshe Dayan (the Minister of Defense) and General David Elazar (the IDF Chief of Staff) were equally confused over the state of affairs in the Sinai. The effect was that no one was directing the battle in an organized way. Elazar, distrustful of Gonen's grasp of the situation, exchanged angry words with his subordinate over what he thought was the Sinai front commander's intent to conduct a premature counterattack. Dayan, suddenly distraught over the loss of many of the Bar Lev strongholds and the advance of the Egyptian forces into the Sinai, advised Elazar that perhaps the best action to take would be to withdraw deep into the desert. Depressed, he went to Prime Minister Golda Meir later that day and attempted to resign.<sup>20</sup>

By the evening of 7-8 October, Elazar had convinced the Prime Minister and Dayan that a limited counterattack was possible on the 8th. Flying to Gonen's headquarters, he issued orders to that effect. Adan was to attack along a north to south axis parallel to the canal and some miles inland; Sharon was to first withdraw to the southeast, then return to support Adan in crossing-- provided the latter found suitable Egyptian bridges intact (see Map B). Elazar would control the operation almost down to the battalion level. However, since neither he nor any other senior commander had made a recent reconnaissance of the battlefield, no one knew what to expect. The Israelis were planning in their prewar fashion-- haphazardly. The result was in keeping with that approach.



By the evening of 8 October, the IDF counterattack had been soundly defeated. Adan's tanks were scattered over a broad area east of the canal, and Sharon had taken no part in the battle. Refusing to accept the obvious fact that unsupported armor could not defeat a combined arms force in good defensive positions, the Israelis had needlessly sacrificed much of their scarce combat power in a poorly planned, piecemeal attack. The historian Martin Van Creveld summed up the failure in this way:

...it was clear that the offensive was commanded by a divisional commander (Adan) who did not know what was going on reporting to a Front Commander (Gonen) who knew even less; and who in turn reported to a chief of staff (Elazar) who knew less than either.<sup>21</sup>

Thus the Israelis lost their second attempt to gain the initiative, and the Egyptian success continued.

In the Egyptian headquarters, optimism soared as the Israelis seemed unable to stop the crossings or break the bridgeheads in the Sinai. Even though there were some Bar Lev outposts that were holding out and the Egyptian losses were mounting, the plan was still going well. By the time Adan's counterattack was defeated on the evening of 8 October, all five infantry divisions of the first echelon were across, with a tank brigade attached to each division. Israeli air had been unable to do more than harass the bridging units at the canal due to the ease of repair that marked the Soviet sectional bridges. The Egyptians assessed the IDF failures thus far in the following manner:

Because of surprise the Israeli tanks were dispersed instead of concentrated, contributing to the destruction of many. The attacking Israelis failed to use antitank missiles, except for occasional ambushes of pursuing Egyptian tanks. The absence of air support, due to the

active Egyptian air defense, seriously affected the Israeli tanks and greatly curtailed their effectiveness.<sup>22</sup>

On the 9th, the Egyptians expanded their bridgeheads eastward to make room for the arrival of armored and support elements behind the lead divisions. The Israelis, however, began to put up a coordinated defense that succeeded in stopping the Egyptians 3-10 miles east of the canal. Using smokescreens and carefully directed artillery fire, the IDF was able to break the rhythm of the Egyptian assaults by negating the effectiveness of the ATGMs. Despite repeated attacks that continued into 10 October, the Israeli defenses held. Temporarily spent, both sides allowed an operational pause to take effect.

The Egyptians had combined deception, careful preparation of the battlefield, and violent execution of their plan to surprise the Israelis in the first four days of the Sinai Campaign. In two battles, they had crossed the canal in force and then defended their bridgeheads against a sizeable counterattack. And, although they had not succeeded in expanding their bridgeheads significantly after defeating the Israelis on the 8th, they still retained the operational initiative.<sup>23</sup>

Their careful planning had insured that most of the Egyptian forces were fighting under the protection of a highly sophisticated, integrated air defense umbrella. Coupled with application of their own air power (albeit in small amounts in order to preserve aircraft), the Egyptians had succeeded in neutralizing the primary Israeli center of gravity-- the IDF air assets. While the Israelis further damaged their ability to apply the synergism of combined arms by fighting with tanks only and violating radio security so that the Egyptians could interdict them early with artillery, the lack of air power crippled the IDF as a fighting force. The vaunted Israeli qualitative

superiority could not be brought to bear against the Egyptians for that key reason.

The Israelis had a poor plan for defending the Sinai, and their initial improvisation was equally bad. Leadership failures on the highest levels led to piecemeal commitment of precious armor at the wrong time. While many Israeli soldiers fought with customary skill and bravery, the initial phase of the campaign was an unqualified defeat that shook the IDF aura of invincibility down to its very foundations. Although the Israeli generals would eventually recover and perform well, they never completely shook off this initial setback.

#### IV: Stalemate

While the period 10-14 October can be accurately called a stalemate, much activity was going on both sides as the Egyptians and Israelis considered the question, "What happens next?" For the Egyptians, the answer seemed to be simple-- hold the bridgeheads until the superpowers forced the Israelis to accept an armistice. For the Israelis, the answer appeared to be equally plain-- destroy the Egyptian bridgeheads and send the attackers scurrying back across the Suez Canal. For a variety of reasons, though, neither answer was acceptable.

On the surface, the Egyptians had no reason to change their plan. They occupied a number of strong positions on the eastern side of the canal, and their SAM umbrella and their armor reserves were still intact. But things were not going well on the Syrian front, and pressure was building for the Egyptians to do something to help out their allies before the IDF ground its way into Damascus.

Other than sending large amounts of troops and supplies to Syria (which there is no evidence to suggest that the Egyptians ever considered), the only way that Syria could be helped was by an Egyptian offensive to draw Israeli attention toward the Sinai. By the morning of October 11th, the Egyptian High Command had decided on doing just that. Both the 2nd and 3rd Armies would launch attacks eastward with armored forces to seize the western entrances of the two key passes in the Sinai, Mitla and Gidi. Both of these passes were thirty kilometers from the Suez Canal, thus requiring that the bridgeheads be expanded three times their present depth. In order to gather the requisite strength for such attacks (there would be three in all), the armored reserves west of the canal would have to be brought across and used as spearheads. The Egyptians later wrote that they knew full well what a gamble they were taking:

The plan had many risks, the most serious of which was the fact the attacking forces would leave the area covered by antiaircraft defense missiles west of the canal. They would be exposed to enemy air attacks, whose density and violence had increased since October 10....<sup>24</sup>

The real danger, however, was that commitment of key armor reserves beyond the reach of air defenses would lead to a situation where the Egyptians exceeded their defensive culminating point. If that were indeed to come to pass, the Israelis would have their best opportunity yet to seize and retain the initiative.

At least one prominent Egyptian officer claims that he knew the risks were too great in such an attack, and he tried to dissuade General Ismail from going beyond the Egyptian's ability to hold what they had achieved. His efforts proved to be in vain:

From the moment Ismail broached the idea of developing the attack to the passes (on 11 October), I opposed it passionately, continuously, and in front of many people....

First thing in the morning (12 October), Ismail returned to the topic. Now, he gave a reason: to reduce the pressure on Syria. Again, I opposed him. Our attack would neither succeed nor significantly relieve the pressure on the Syrians.

"Look," I said, "despite their losses the enemy still has eight armored brigades out there in front of us. The enemy air force can still crimp our ground forces as soon as they poke their noses beyond our SAM umbrella. We have proof of that.... Advance and we destroy our troops without offering any significant relief to our brothers the Syrians."

At midday, the Minister returned. "It is a political decision," he said. "We must develop our attack by tomorrow morning."<sup>25</sup>

General Shaazly, the Egyptian Chief of Staff, further states that he knew the costs of drawing the operational reserves east of the canal, inasmuch as the Egyptian forces would be unable to defend their homeland if the Israelis crossed. Nonetheless, Ismail and his superiors prevailed. In one of the few cases in the modern history of coalition warfare, one ally would risk its very survival in order to save another.<sup>26</sup>

While the Egyptians were using the pause to plan their futile attack, the Israelis struggled to regain their confidence. General Elazar, correctly learning from the 8 October defeat that he could not fight the Sinai battles and be the IDF Chief of Staff, too, appealed to retired General Chaim Bar Lev on 9 October to come out of retirement and take command of operations in the Sinai. Bar Lev would be Elazar's personal representative in the theater of operations, directly over Gonen. Surveying the command arrangements soon after his arrival, Bar Lev quickly realized that strong personalities were vying for influence in the conduct of the war. The most dangerous of

these personalities, Bar Lev decided, was General Sharon. On 12 October, Bar Lev requested that Sharon be relieved. Dayan, once more reluctant to be forceful in this campaign, rejected the request, "on the grounds that it would create unnecessary internal political problems."<sup>27</sup> Like the Egyptians, the Israelis were having extreme difficulties conducting the campaign without political interference.

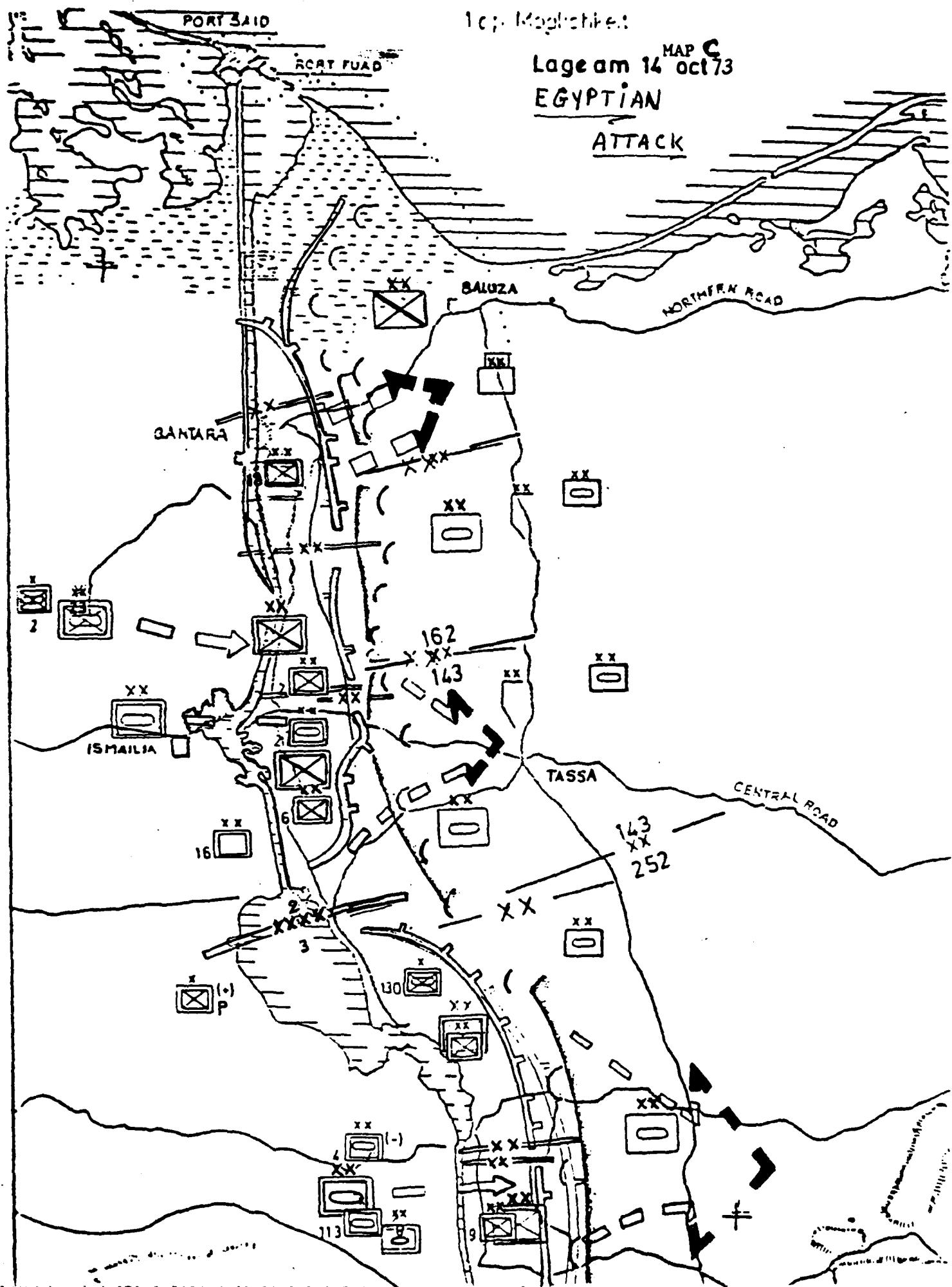
Despite uncertain command decisions and strong personality clashes, the Israelis managed to decide on an offensive. Sharon's reconnaissance brigade, under the dynamic leadership of Colonel Amnon Reshef, had discovered the boundary between the two Egyptian armies on 9 October. Reshef had been quickly ordered to withdraw after reporting a gap in the vicinity of the "Chinese Farm" (the site of a former agricultural experiment by Japanese researchers in the mid-1960's that the Israelis had trouble identifying correctly), lest the Egyptians discover that the boundary had been identified. This area would become the focal point for IDF planning as they searched for a means to seize the operational initiative.

By the 12th of October, General Bar Lev had devised a plan for a crossing at Deversoir-- where Reshef had found the boundary--and he had obtained Elazar's approval. Both went to seek Dayan's blessing, but the Minister of Defense was cautious once again. He feared the tenuous nature of a single axis of advance through one crossing site, and he doubted that the Egyptians would surrender just because an IDF division crossed into Egypt proper. During the meeting, though, intelligence reports reached Tel Aviv that indicated the Egyptians were crossing their armored reserves into Sinai. If the Egyptians would oblige them and attack beyond the vaunted SAM umbrella, the three men reasoned, the Deversoir crossing would expand into a major invasion. The Egyptian Third Army could be cut off and, more

importantly, the fixed SAM sites in Egypt could be destroyed. Then victory would be possible. Since this new intelligence indicated a major Egyptian attack was in the offing, Bar Lev's plan was approved. The Israeli attack would follow the defeat of the Egyptian assault. Sharon's division, dragging a preassembled bridge with it, would cross first.

The stalemate ended violently on the morning of 14 October, as the Egyptians launched their three pronged assault against the prepared Israeli positions (see Map C). Adan held the north of the IDF sector, Sharon the center, and a new division under General Magen held the south. In the biggest tank battle since Kursk, some 2,000 tanks joined in a series of fierce struggles. The addition of antitank missile-firing infantrymen to the IDF tank forces gave the defenders advantages similar to those that the Egyptians had enjoyed but a few days earlier. As the vaunted Israeli Air Force swung into action west of the Mitla and Gidi Passes, the Egyptians were soundly defeated.

The Egyptians lost over 260 tanks to only 10 for the Israelis. The severity of the defeat caused the commander of the Egyptian 2nd Army, General Saad Mamoun, to suffer a heart attack. Shazly tried to convince Ismail that it was essential to regroup the remaining armor once more on the western side of the canal, but the Minister of War, Ismail Ali, forbade such a move, fearing that it would destroy the soldier's morale. As a result, the Egyptians now lay vulnerable to attack and subsequent defeat on their own soil. They had lost the capability to defend.



## V: Israeli Counteroffensive

The abortive Egyptian attack on 14 October had failed for a number of reasons: a) violation of mass by attacking on a number of axes; b) no deception or surprise to help overcome the inherent advantage of the defender; and c) a lack of combined arms synergism caused by the Egyptian armor forces attacking without enough infantry and going beyond the range of their air defense umbrella. For many of the same reasons, the IDF had failed to stop the initial Egyptian assault across the canal. The Israelis had lacked infantry to support their armor on 6 October, and they later tried to counterattack without deception, surprise, or the effective use of their famous air support.

Having decided to assume the operational defensive after 10 October while they concentrated on defeating the Syrians, the Israelis made some remarkable decisions. First, they looked for deficiencies in their doctrine which had led to their early defeats. Next, they sought to remedy these shortcomings as rapidly as possible. Finally, they formulated a plan which would allow them to gain the initiative and defeat the Egyptian forces in the Sinai.

The IDF had to find a way to defeat the Egyptians offensively, because only then could they claim victory in the campaign. They were the ones who had to regain lost territory and throw the attackers back across the Suez Canal. As the smaller force, it made sense that they could not accomplish these goals if they remained on the defensive until the superpowers halted the fighting. Theirs was a force that was not ideologically or doctrinally disposed to attrition warfare. So they had to defend long enough to develop

a plan and reorganize their forces so that they could successfully attack--but not too long, or the war would end before they could win it. The Israelis were in a precarious position.

What makes their resurgence all the more remarkable is that they sought to regroup, plan, defend, and then counterattack while their chain of command was constantly in a state of turmoil. With Dayan seemingly timid and pessimistic, it was left to Elazar to energize the Israeli forces and guide them to victory. And, despite his failures early in the war, he proved to be the commander the IDF needed to lead them to their goal.

By the time the Egyptians were defeated on 14 October, Elazar and Bar Lev had already taken steps to put the IDF back together as a superb offensive fighting machine. Infantry had been brought in from Israel and integrated with the armor, ATGMs were hauled out of warehouses and issued to all of the divisions in large numbers, and plans were virtually complete to attack and destroy the Egyptian bridgeheads from the rear. As mentioned earlier, the most dynamic IDF commander--Sharon-- was chosen to lead the assault back across the canal.

The plan was to pierce the Egyptian defenses at Deversoir, where the reconnaissance elements of Reshef's brigade had found the enemy army boundary on the 9th. Sharon would lead the crossing forces, with Adan and Magen following. The Great Bitter Lake would anchor the southern flank of the penetration, while two brigades of Sharon's division would hold the northern shoulder at the Chinese Farm. Using rubber assault boats for the lead infantry and rafting a company of tanks across, Sharon planned to establish a shallow bridgehead on the western bank of the Suez while he dragged a preconstructed bridge up and put it across for later elements to cross in strength. Fortunately for the Israelis, two factors helped their

chances for success: a) the IDF had built several roads leading up to crossing sites before the war, and Deversoir was one of them; and b) the Egyptians drew their armor reserves over to the eastern side of the canal for the 14 October attack, and then left them there afterward.

With the Egyptians licking their wounds, Elazar ordered the attack on the evening of 15 October. Sharon's four brigades, including that of the daring Reshef and a brigade of paratroopers, set out at 1600 to open the corridor and push the initial forces across. A night attack was planned because that would lend surprise to the Israeli assault, so that the preconstructed bridge could be thrown across the canal by dawn on the next day. While one brigade of Sharon's division, commanded by Colonel Tuvia Raviv, attacked the southern flank of the Egyptian 2nd Army, Reshef would turn south in a flanking movement toward the crossing site, widening the corridor as he went. The paratroopers were right behind Reshef, transported in World War II vintage American half tracks and trucks. The trail brigade, under Colonel Erez, would bring up the bridge. Raviv had to make a convincing attack north toward the Tasa-Ismalia road, to focus the attention of the main 2nd Army forces in the area, the Egyptian 16th Infantry and 21st Armored Divisions, away from the crossing effort (see Map D).

Reshef's initial advance went well, as he captured several key points along the Tirtur Road leading to Deversoir. Raviv's supporting attack went as planned, but then the enemy ceased to cooperate. The 21st Armor Division, recovering from its mauling on the 14th, had been moving south toward the Chinese Farm all day on the 15th, and Reshef ran squarely into them in the darkness. Units of the 16th Infantry Division were also further south than the Israelis thought, and they were mixed in with the 21st.



Reshef's tanks and armored personnel carriers were suddenly in the midst of an already confused mass of Egyptian men and equipment, and chaos erupted:

The scene in the area was one of utter confusion: along the Lexicon road (which joined the Tirtur road from the south) raced Egyptian ambulances; units of Egyptian infantry were rushing around in all directions, as were Egyptian tanks. The impression was that nobody knew what was happening or what to do. On all sides, lorries, ammunition, tanks, surface- to- air missiles on lorries and radar stations were in flames in one huge conflagration which covered the desert. It was like Hades.<sup>28</sup>

The fighting completely absorbed Reshef's brigade (with half of it being destroyed in the process), but Sharon sent the paratroopers under their tough commander, Colonel Danny Matt, ahead anyway. By 0130 on the 16th, Matt's first battalion had crossed into Egypt. At 0800, his brigade held a bridgehead three miles inland. Erez crossed in the morning, and now both tanks and infantry were operating behind the Egyptian 2nd and 3rd Armies, consolidating their foothold and destroying precious SAM sites.

Dayan, though, was dismayed over the battle of attrition that continued at the Chinese Farm. Early on the 16th, he urged Elazar to pull the two brigades back before they were cut off and annihilated. But Elazar, Bar Lev, and Gonen would hear none of it, and they steadfastly refused to call off the crossing. Despite the fact that the Tirtur Road was a virtual gauntlet and the preconstructed bridge was not across due to heavy enemy fire at Deversoir, the Israeli Southern Command was committed to their plan.

For the next twenty-four hours, the decision to continue the crossing was in grave danger of having been a mistake. The timely arrival of Adan's division at the Chinese Farm and the perseverance demonstrated by Raviv in

continuing his supporting attack north of the Farm finally opened the corridor enough to get a pontoon bridge across late on the 17th. Now Adan's division could cross and expand the bridgehead.

The Egyptians had not realized the gravity of their situation right away. When reports reached the headquarters of the armed forces that Israelis were crossing into Egypt, the reaction was slow and hesitant. Rather than bring forces back across the canal and cut off or destroy the bridgehead, Ismail ordered the 25th Armored Brigade of the 3rd Army to launch a counterattack from the south while the forces in the Chinese Farm attacked south toward Deversoir. This uncoordinated attack was destroyed by Reshef's brigade and Adan's forces. Adan crossed on the 18th of October.

On the western side of the canal, the Egyptians had responded in an equally feeble manner. Although the first two brigades across were without reinforcement for over 37 hours, the Egyptians could not mount a concerted effort to destroy the understrength Israelis. One Israeli paratroop battalion found itself cut off and encircled on the 17th, but like their American counterparts at Normandy in 1944, they grimly held on and awaited reinforcements to link up with them. Although General Shazly asserted later that he tried in vain to get Ismail and Sadat to accept the severity of the threat and commit a major force to attack the crossing, the Egyptians' only major attempt to defeat the bridgehead on the western shore was to put the area under continuous bombardment and make periodic suicide air attacks on the bridges. Those efforts amounted to little more than harassment.

The Israeli crossing became the focal point of the campaign, as President Sadat finally alerted Soviet Premier Kosygin that he needed an armistice on 20 October. Kosygin had been warning Sadat of the magnitude

of the threat before the 20th, even going to the point of showing the Egyptian leader satellite photographs of the Israeli dispositions, but Sadat apparently did not want to accept the gravity of the crossing immediately.<sup>29</sup>

The hesitant reaction of the Egyptian high command was in part a reflection of the lack of flexibility in their institutional structure. The order required for a concerted counterattack by the 3rd and 2nd Armies against the crossing site at Deversoir required signatures of four different staff officers in order to be executed--after the order was issued by the Armed Forces Headquarters. The Egyptians performed superbly in their assault crossing of 6 October; however, they were totally lacking in resilience when they had to improvise:

Just as its own canal crossing had shown the virtues of the Egyptian Army, so its response to the Israeli crossing of 15-16 October cruelly exposed its faults. The Egyptian military machine does best in set pieces: working out and carrying through large and elaborate plans.<sup>30</sup>

On October 22nd, a cease fire resolution was accepted by both sides. The Israelis had created a sizeable bridgehead on the west bank of the Suez, while the Egyptians still held most of their original gains on the eastern side. For the Egyptians, however, the situation was precarious, for the 3rd Army was nearly encircled. Adan's division, along with that of Magen, had swung south and were ravaging the 3rd Army's rear. If its supply lines were completely cut off, it would soon face dire shortages of food and water. The 2nd Army was being sustained through the Suez to Cairo road, which Sharon had reached but failed to cut. Most importantly, the Egyptians had lost most

of their fixed SAM sites, and the Israeli Air Force thus roamed the skies freely.

As the 3rd Army tried to prevent encirclement, the Israelis abandoned the cease-fire on 23 October and tried to take Suez City, but were repelled with sizeable losses. In the north, Sharon raged against Gonen and Bar Lev, claiming that he could have encircled the 2nd Army, too, if his superiors had not been timid and cautious. The Soviets, seeing that things were deteriorating rapidly for the Egyptians, placed seven airborne divisions on alert and warned the United States that the Israelis must be stopped. The Americans complied, and got the Israelis to halt actions again on the 24th. After increased tensions which almost led to superpower conflict, a final end to hostilities came on the 27th, with the Israelis holding some 600 square miles of Egypt and the 3rd Army facing severe hardships. The Egyptians, for their part, still held bridgeheads 5-7 miles deep along almost the entire length of the canal.<sup>31</sup>

The Israeli crossing success was facilitated by the hesitant, piecemeal Egyptian response--but it was nonetheless quite a feat. Using surprise and deception, the IDF regained its ability to maneuver and thereby assumed the operational offensive. Once they had the initiative, the IDF leaders knew exactly what to do with it. The crossing plan, codenamed VALIANT, was daring and innovative. Only an armed force with the flexibility and agility of the Israeli Defense Forces could have recovered as quickly and completely as was the case in this counteroffensive. Skillfully integrating infantry with armor-- after years of neglect-- the ground forces were able to destroy the SAM sites and thus free the air to recreate the combined arms synergism the Egyptians could not withstand.

By 27 October, the Israelis clearly had the upper hand from an operational standpoint; however, they could not prosecute the campaign any further. The major reason for the Israeli inability to continue the destruction of the 3rd Army and occupation of more Egyptian territory is that the United States and the Soviet Union would not allow it. Although the Soviets were interested in promoting an armistice while clear victory was not obvious for either side, both the U.S.S.R. and the U.S. had another concern: logistics.

After the first few days of the campaign, both the Egyptians and the Israelis had exhausted almost all of the equipment they had. Since neither side had an arms industry, each depended on one of the superpowers to replace its losses. The replacements arrived, but they did not last long. As the fighting moved into its third week, the Americans and the Soviets had sent the protagonists all of the equipment they had to spare.

Almost 1500 tanks were destroyed or lost in the campaign, as well as hundreds of aircraft. In 1973, the United States had scaled down production in the aftermath of the Vietnam War, and the Soviets were at peacetime production levels, too. The Americans were producing thirty tanks per month, and the Soviets even fewer.<sup>32</sup> Both sides had to reduce their war stocks drastically in order to resupply the Israelis and Egyptians, and they could not replace this equipment for years (unless they were willing to gear up to full war production, which neither Washington or Moscow could afford to do). Thus by the time the Israelis gained the operational initiative, both superpowers were anxious to end the war. The tremendous expenditures of equipment (as well as ammunition) astounded planners on both sides, accelerating their desire not to let the conflict proceed any further.

## VI: Conclusion

The war was a near disaster, a nightmare...."

This statement by Golda Meir expresses much of the feeling that has haunted the Israelis since the armistice of 27 October 1973.<sup>33</sup> Stunned by the size and scope of the Egyptian attack of 6 October, the IDF was only barely able to regain the initiative within the limited time that the superpowers allowed the fighting to go on. Even though the Israelis were firmly established in Egypt with their fingers around the throats of the 3rd Army, they cannot claim operational victory in this campaign. The Sinai Campaign of 1973 can best be described as a draw, with the IDF clearly having the upper hand at the end.

The Egyptians can be credited with planning an excellent campaign in terms of ways, means, and ends. Had they been able to retain the posture they held on the 10th of October, they would have most likely achieved one of the most stunning operational victories of this century. Their perceived need to rescue the Syrians, however, led to the collapse of much of what they had accomplished.

From a theoretical standpoint, the Sinai Campaign provides us with a number of issues to consider. First, Clausewitz' time honored dictum that the defense is the stronger form of warfare appears to have limitations. For the Israelis, the smaller and more mobile force, the defense was only stronger when they could bring all of their arms to bear on the attacker-- on 14 October. On the 6th, they were rapidly defeated by a larger foe even though they had years to prepare a coherent defense.

The Egyptians used the defense to excellent advantage, primarily because they had a force structure and a mental disposition better suited to it. As the larger, more cumbersome armed force, they only had a limited ability to assume the offensive in the Sinai of 1973. By using surprise and deception, they made maximum use of their offensive capability to cross the canal by overwhelming the defending Israelis. Once they had accomplished this, they quickly assumed the defensive knowing they were better suited to fight that way. In essence, they were a better countermobility force than they were a mobile force.

Once the Israelis had achieved some degree of stability in the theater of operations (on the 10th), they diligently searched for a way to gain the initiative by going over to the offense. While it is true that they held the initiative once they knew the Egyptians were going to attack beyond their air defense umbrella on the 14th and they set up a series of ambushes to destroy Ismail's armor, they still had to counterattack to succeed. They could not afford to fight a campaign of attrition with the Egyptians any more than the Egyptians could afford to fight a campaign of maneuver with the Israelis. In this campaign, then, it appears that the defense was only stronger for the larger, less mobile side.

Identifying the enemy's center of gravity and neutralizing it proved to be a critical theoretical concept in this example. Both the Egyptians and the Israelis fought this way; however, neither did so throughout the campaign. The Egyptians used their available technology to build an integrated air defense network to protect their ground and air forces from the Israeli Air Force--thus neutralizing the pivotal element of the IDF combined arms team. Having done this, they used their other main technological asset, the antitank guided missile, to neutralize the other Israeli center of gravity--

the armor forces. The Egyptians failed to maintain the ability to neutralize these centers, though, and the Israelis regained the use of those forces. The Egyptians applied the theoretical concept correctly, but insufficiently.

Perhaps learning from their adversaries, the IDF identified the Egyptian centers of gravity as their armor reserves and their surface to air missile launching capabilities. They proceeded to destroy both of these elements, thus doing a better job than the Egyptians of applying the concept. They also did a better job of protecting their centers of gravity than the Egyptians did, principally by integrating ATGM equipped infantry with their armor and using ground forces to destroy SAM sites before bringing their air force in to fight. Both of these measures were done in reaction to the Egyptian initial successes. Nonetheless, the Israeli ability to identify and neutralize the Egyptian centers of gravity was critical to their operational success.

Personalities were a major factor in this campaign, as they have been in all others. The Israelis displayed a remarkable ability to operate effectively despite some bitter personality clashes. "Gonen," Sharon shouted into the radio during a critical phase of the crossing at Deversoir, "if you had any balls, I'd tell you to cut them off and eat them."<sup>34</sup> Coming from a subordinate to his superior officer, it is astounding that such attitudes did not seriously hinder the combat effectiveness of the IDF. Bar Lev, for example, tried twice to get Sharon relieved without success. Dayan, a national hero in Israel for his courage and tenacity, acted timidly throughout this campaign. Elazar, for his part, learned from his initial mistake on 8 October and backed away from the direct management of forces in contact, although he appointed Bar Lev to directly oversee Gonen as commander of Southern Command. In summary, the Israeli commanders

were a strange mix of contrasting personalities that somehow managed to succeed more often than they failed. Clearly the unity of purpose that the Egyptian threat posed brought them together enough to continue the fight in an aggressive manner; thus, the effort gained momentum up through the Deversoir crossing.

Less is known about the Egyptian commanders, with the possible exception of General Shazly, who went to great length to exonerate himself after the war. General Ismail seems to have been a steady leader, though not particularly capable of improvising once the battlefield situation changed from what was envisioned. This criticism is as more a part of the heritage of the Egyptian officer corps than it is a direct challenge to Ismail. The Egyptians had worked diligently to improve their officer leadership after the debacle of 1967; however, they could not erase years of laconic attitudes in a matter of months. Even with strong Soviet influence, the Egyptians were at best a plodding, methodical group of officers in 1973. The 2nd Army commander reacted to disaster on the 14th by having a heart attack. Shazly was ultimately relieved on the 20th for objecting too strongly to Sadat's decision not to withdraw forces from the east side of the Suez to fight the Israeli penetration. It seems that the Egyptians were not well suited to personality conflicts within their command structure, and any such incidents resulted in the removal of the subordinate involved.

Friction and chance also played major roles in the conduct of this campaign and its outcome. Had Sharon's reconnaissance elements not found the boundary between the 2nd and 3rd Armies on the 9th of October, the Israeli chances for a successful crossing within the time that they had available would have been much reduced. Many times the Israelis and Egyptians had an inaccurate picture of the fighting, especially at the highest

levels, but both sides tended to stick with the plan until situations forced them to change. In the case of the Egyptians, they were often too rigid to change even when some commanders realized that adjustment was necessary. The failure to react effectively to the IDF crossing at Deversoir is an example of this rigidity, which friction exacerbated. The Israelis, on the other hand, often overcame friction simply by increasing their effort to succeed, as they demonstrated at Deversoir. Despite the fact that the Tirtur Road was not open, Bar Lev and Gonen resisted the temptation to abandon the crossing operation, and took a great risk in so doing. The rewards proved to be worth the risk, but it is doubtful that less determined men would have succeeded in the face of such dangers.

Finally, the increasing cost of high intensity war, as demonstrated in this case, serves to mitigate the opportunity to practice the operational art without substantial consideration of political and economic factors. The Israelis could not afford to deploy initially as a prudent commander would have preferred. Gonen in fact objected strenuously to the poor condition of the Bar Lev defenses and the shallow nature of the DOVECOTE plan from his assumption of command in July until the Egyptian attack in October. Once the fighting started, supplies and equipment were used up at a terrific rate, more than even the superpowers could afford to sustain for very long. Since neither side could reasonably expect to defeat the other totally, both the Egyptians and the Israelis should have realized that the end state their plans should achieve are those military conditions which make the political settlement favorable. The Egyptians certainly were more aware of this political reality of modern war at the outset of the campaign than their opponents. After the war, the Israelis were still unsure whether they had chosen the proper course of action once they stabilized the front. Both the

findings of the Agranat Commission and the eventual loss of the Sinai seem to support those who question the achievements of the Diversoir crossing.<sup>35</sup>

Thus the Sinai Campaign brings into stark reality the complexities of modern operations. Protracted campaigns will not be possible in the future, based on this model, unless the two sides are willing to pay a huge price. The utter devastation of the economies of Iran and Iraq due to their bitter struggle seems to verify that conclusion. The skillful modern operational commander will have to be a warrior with a keen eye for the effects of his military operations before the fighting starts. He will have to be able to visualize an attainable end state that his forces can accomplish quickly, and he will have to be able to resist the temptation to change his plan when political demands to do so are strong, but not yet overpowering. Finally, the operational commander of the future will have to be able to keep a running balance of ends, ways, and means so that he will know where he stands as the battle rages. He can thereby convince his political leaders that victory is still attainable when it seems to be distant, and he can continue to tell his soldiers that their lives are too valuable to be wasted on unimportant goals. Genius will be more important than ever, then, to the operational commander of the future. The Sinai Campaign of 1973 is but one example of why this is so.

## ENDNOTES

<sup>1</sup> Chaim Herzog, The Arab-Israeli Wars: War and Peace in the Middle East From the War of Independence Through Lebanon (New York: Vintage Books, 1982), p. 323.

<sup>2</sup> Carl von Clausewitz, On War, edited and translated by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1976), p. 358.

Clausewitz' exact words are that "*the defensive form of warfare is intrinsically stronger than the offensive*" (italics by the editors).

<sup>3</sup> Hassan El Badri, Taha El Magdoub, and Mohammed Dia El Din Zohdy, The Ramadan War, 1973 (Dunn Loring: T.N. Dupuy Associates, 1974), p. 16-17.

According to Colonel Mohammed Helal, the Egyptian Assistant Defense Attaché to the United States in 1984, this book is the "official" version of the 1973 war-- as far as the Egyptians are concerned. This book leads the reader to believe that the Egyptians planned on a limited campaign from the end of the 1967 War, but I doubt the validity of that assertion.

<sup>4</sup> For a detailed discussion of Sadat's delicate relationship with the Soviets, see The London Sunday Times' Insight Team, The Yom Kippur War (Garden City: Doubleday and Company, 1974), pp. 47-62.

<sup>5</sup> LTG Saad El Shazly, The Crossing of the Suez (San Francisco: American Mideast Research, 1980), p. 32. Shazly takes credit for the deciding that Granite Two was beyond the abilities of his forces, but he does acknowledge that Ali accepted this assessment.

<sup>6</sup> Ibid., p.37.

<sup>7</sup> Ibid., p. 24-25. Shazly gives a thorough analysis of the capabilities and limitations of the Egyptian air, ground, and naval forces on pages 20-24.

<sup>8</sup> There exists the possibility that a force may have several "centers of gravity", and the Israelis are no exception. In FM 100-5 Operations (1986) the authors state that "An effective campaign plan orients on what Clausewitz called the enemy's 'centers of gravity,' his sources of physical strength or psychological balance." (p.29).

<sup>9</sup> The Israelis, of course, insist that they were on the verge of assuming the operational offensive after the Egyptian attack halted during the period 10-12 October. However, other than their accounts of the action there is little evidence to substantiate that claim.

<sup>10</sup> Ariel Sharon as quoted in The London Sunday Times Insight Team, The Yom Kippur War (Garden City: Doubleday and Company, 1974), p. 27. The entire chapter two is entitled, "The World's Smallest Superpower."

<sup>11</sup> Gunther E. Rothenberg, The Anatomy of the Israeli Army (New York: Hippocrene Books, 1979), p. 174.

<sup>12</sup> There are differing opinions as to the amount of lead time that the Israelis needed in order to mobilize their reserves. When I had the

opportunity to discuss this issue in 1983 with several IDF veterans of the campaign . their consensus was that 72 hours was the planning figure they used in preparing war plans in 1973 .

13 Herzog, p. 237. Herzog notes that the Soviets had extensive satellite coverage over the Sinai, which they used during the campaign with great effect.

14 A.J. Barker, "Israel After the Yom Kippur War: Zahal Reflects on the Lessons," RUSI Journal for Defense Studies (Volume 119:28-31, June 1974), p.28.

15 Dennis Chaplin, "The Middle East War-- An Assessment," RUSI Journal for Defense Studies (Volume 118:30-34, May 1974),p. 32.

16 Shazly, p. 223.

17 For an excellent brief overview of Mendler's futile effort, see Rothenberg, pp. 185-186.

18 Martin van Creveld, Command (Ft. Leavenworth: U.S. Army Command and General Staff College, 1985), p. 200.

19 Ibid., p. 202.

20 There are several good accounts of this confrontation. Van Creveld puts it into context with other events in Command, p. 204. Meir discusses it in My Life (London, 1975),p. 360 and Dayan in The Story of My Life (London, 1976), p.500-501.

21 Ibid.,p. 223.

22 Badri, et al, p. 77.

23 I contend that the Egyptians still held the operational initiative at this point in the campaign because they were still dictating the terms of battle. As FM 100-5 states, the defender can have the initiative:

In the defense, initiative implies quickly turning the tables on the attacker. The defender must act rapidly to negate the attacker's initial advantage of choice of time and place of attack.... Planning anticipates likely enemy courses of action so no time is lost in shaping the battle-- setting the tempo and conditions of enemy operations-- and in making adjustments. (p.15)

24 Ibid.,p.96.

25 Shaazly, pp. 245-246.

26 The lack of evidence in this matter results in the frustrating conclusion that the Egyptians staked everything on the 14 October attack to save Syria, knowing full well that they were gambling with very high stakes--almost more than they could afford to lose. The Soviets, who probably know the truth, are saying little about the motives for the attack. I still find it astonishing that Egypt would have risked its survival on bailing out the

Syrians. There is no evidence of such international selflessness in any other relations of Arab states, before or since 1973.

27 Herzog, p. 255. Gonen had requested the relief of Sharon for exceeding limits established for an attack on 9 October. Bar Lev would again try to get Sharon relieved later in the campaign, again without success.

28 Herzog, p. 265. This chapter in Herzog's book is particularly vivid in the description of Sharon's crossing, and it deserves detailed study.

29 Edgar O'Ballance asserts that Kosygin showed Sadat satellite photographs of the Israeli penetration as early as the 17th; other sources acknowledge that Sadat saw such photographs, but the dates are unclear. All references indicate that the Egyptian president knew the extent of the IDF penetration by the 20th.

30 The London Sunday Times Insight Team, The Yom Kippur War (New York: Doubleday and Company, 1974), p. 340.

31 This summary of the last stages of the campaign comes largely from Rothenberg, p. 195-197.

32 Both the losses incurred by the two sides in the Sinai Campaign and the superpower production figures reflect the best estimates of several authors as well as my own assessment. For more information, see Edgar O'Ballance, No Victor, No Vanquished, pp. 331-333; and Gunther Rothenberg, The Anatomy of the Israeli Army, p.197.

33 Meir as quoted by O'Ballance, p.330.

34 Sharon as quoted in by the London Sunday Times Insight Team, p. 337.

35 For information on the Agranat Commission, see Herzog, p. 315-323. While I acknowledge that the loss of the Sinai was due to the Camp David accords in 1978, it is certainly questionable whether or not the eventual loss of that territory was made more certain by the encirclement of the 3rd Army and the occupation of 600 square miles of Egypt. Who appeared to be the more belligerent at the end of the campaign? World opinion was certainly against the Israelis because of the way they resisted the armistice.

## BIBLIOGRAPHY

### BOOKS

Adan, A. On the Banks of the Suez. San Francisco: Presidio Press, 1980.

Badri, Hassan El, Taha El Magdoub, and Mohamed Dia El Din Zohdy. The Ramadan War, 1973. Dunn Loring: T.N.Dupuy Associates, 1974.

Beckett, I., S. Innes, E. Morris, M. Orr, and D. Rosser-Owen. Middle East Conflicts From 1945 to the Present. New York: Crescent Books, 1983.

Clausewitz, Carl Von. On War. Edited and Translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1976.

Dayan, Moshe. The Story of My Life. London: Weidenfeld and Nicolson, 1976.

Dupuy, Colonel T.N. Elusive Victory: The Arab-Israeli Wars, 1947-1974. London: Macdonald and Jones, 1978.

Heikal, M. The Road to Ramadan. London: Collins Press, 1975.

Herzog, Chaim. War of Atonement: October, 1973. Boston: Little, Brown, and Company, 1975.

---

The Arab-Israeli Wars: War and Peace in the Middle East From the War of Independence Through Lebanon. New York: Vintage Books, 1982.

Hirst, D. and I. Beeson. Sadat. London: Faber and Faber, 1981.

London Sunday Times Insight Team. The Yom Kippur War. Garden City: Doubleday and Company, 1974.

Luttwak, E. and D. Horowitz. The Israeli Army. New York: Harper and Row, 1975.

Meir, Golda. My Life. London: Weidenfeld and Nicolson, 1975.

O'Ballance, E. No Victor, No Vanquished. London: Faber and Faber, 1978.

Rothenberg, Gunther. The Anatomy of the Israeli Army. New York: Hippocrene Books, 1979.

Shazly, Saad El. The Crossing of the Suez. San Francisco: American Mideast Research, 1980.

Van Creveld, Martin. Command. Ft. Leavenworth: U.S. Army Command and General Staff College, 1985.

#### ARTICLES AND PERIODICALS

Barker, A.J. "Israel After the Yom Kippur War: Zahal Reflects on the Lessons." RUSI Journal for Defense Studies. June 1974, pp. 28-31.

Chaplin, D. "The Middle East War-- An Assessment." RUSI Journal for Defense Studies. May 1974, pp. 30-34.

Knight, Captain J.E. Jr. "The October War and After." (part III of a series). Marine Corps Gazette. June 1974, pp. 34-43.

Miley, General H.A. Jr. "Mid-East War Logistics." Army Logistian. July-August 1974, pp. 2-5.

Roth, Captain Ray G. "Operation Badr: Crossing the Suez." Armor. May-June 1982, pp. 23-25.

Soffer, A. "The Wars of Israeli in Sinai: Topography Conquered." Military Review. April 1982, pp. 60-72.

Tal, Major General Israel. "Israel's Defence Doctrine." Defence Update International. Volume 50 1984, pp. 8-16.

END

10-87

DTIC